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ACTION MEMORANDUM REGARDING PROPOSED TIME-CRITICAL REMOVAL ACTION  
FOR SITE 3 TRUMAN ANNEX DICHLORODIPHENYLTRICHLOROETHANE MIXING AREA  
NAS KEY WEST FL  
9/1/1995  
BECHTEL ENVIRONMENTAL INC

## **ACTION MEMORANDUM**

DATE: September 1995

SUBJECT: Time-Critical Removal Action at the Truman Annex DDT Mixing Area,  
(IR-3), Naval Air Station (NAS) Key West, Florida

PREPARED BY: Bechtel Environmental, Inc. (BEI)  
for  
Southern Division Naval Facilities Engineering Command

TO: Administrative Record File

### **I. PURPOSE**

The purpose of this Action Memo is to document the proposed time-critical removal action described below for the Truman Annex DDT Mixing Area (IR-3) site, NAS Key West, Monroe County, Florida. This removal action will be performed as a time-critical removal action pursuant to the National Contingency Plan (NCP) (see 40 CFR 300.415).

### **II. SITE CONDITIONS AND BACKGROUND**

#### **A. Site Description**

IR-3 is located at the former site of NAS Building 265 and is depicted in detail in Figure 1. The site covers an area about 0.25 acres and is located approximately 1,100 feet inland from the coastline in an area that is subject to restricted vehicular and pedestrian traffic. Fort Street, which is the western-most street of a residential area, is located to the northeast of the site. There are unconfirmed reports that some of the nearby residents have potable water wells in their homes. The site is underlain by highly permeable soils with no surface water drainage or holding features present. The water table occurs at approximately 5 ft below land surface. The surface of the site is flat with tall grass and weeds.

From the early 1940's to the early 1970's, the location was used as a DDT mixing area. Powdered DDT concentrate was mixed with water and temporarily stored in 55 gallon drums both inside and outside the former building. The mixed solution was then transferred to trucks for application.

The soils and groundwater at the site have been impacted with pesticides, primarily DDT, DDE, and DDD from spills. The contamination exceeds state and federal action levels and has potential for adverse human health and environmental impacts. The extent of groundwater contamination has not been determined.

#### B. Other Actions to Date

IT Corporation conducted a Remedial Investigation/RCRA Facility Investigation (RI/RFI) in which the IR-3 site was preliminarily characterized. In order to bound the extent of contamination at the site, BEI conducted a delineation sampling event in the summer of 1995. Because this removal action is intended to remove the source of contamination in soil only, further action to address groundwater, if necessary, will be conducted at a later date.

#### C. State and Local Authorities Role

The site is not on the CERCLA National Priorities List, nor is the site proposed for NPL listing. Therefore, FDEP is the lead oversight agency, and EPA Region IV reviews actions in an advisory capacity. FDEP has concurred in the time-critical removal determination, and EPA has reviewed the scope of the proposed action.

### **III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT**

There is a residential area immediately across the street from the site. There is potential for contaminant migration to both city property and the residential properties across the street. There are unconfirmed reports that nearby residents have potable water wells in the area, and the groundwater at IR-3 has been impacted by the pesticide waste spilled at the site.

The substances of concern are pesticides (DDT, DDE) and metals (i.e., arsenic and lead), and exceed promulgated state and federal action levels and residential cleanup goals.

### **IV. ENDANGERMENT DETERMINATION**

**Actual releases of hazardous substances from this site, if not addressed by implementing the response action selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, or welfare, or the environment.**

## **V. PROPOSED ACTIONS AND ESTIMATED COSTS**

### **A. Proposed Actions**

The Initial Removal Action (IRA) objective for IR-3 is contaminant source removal to prevent further migration of waste into other media. To accomplish this objective, the scope of work for IR-3 will consist of the following elements:

- excavation of pesticide, lead, and arsenic contaminated soils;
- transportation of waste to a RCRA-permitted treatment/disposal facility;
- backfill with clean fill; and
- stabilize with topsoil and sod.

The Interim Remediation Goals will be to remove lead, arsenic, and pesticide contaminated soils above CERCLA and FDEP established guidelines. For lead, a limit of 400 ppm is established based on revised CERCLA guidance dated July 1994. For arsenic, a limit of 10 ppm is established based on requests by FDEP and EPA Region IV dated May 2, 1995. For DDT, a limit of 3.1 ppm is established based on FDEP Soil Cleanup Goals for Military Sites in Florida (guidance), dated April 5, 1995.

The proposed action will contribute to the efficient performance of long-term remedial actions with respect to the release. Future plans for the site include addressing the issue of contaminated groundwater in accordance with the remainder of the CERCLA cleanup process issuance of a Record of Decision (ROD).

Alternative technologies have been considered. Thermal treatment of the wastes could be performed, but would be ineffective on the metals contamination. In addition, the thermal treatment unit would be difficult to operate given the proximity of residential areas. Biotreatment of pesticide wastes is an emerging technology option; however, it is not an appropriate technology for treating metals.

ARARs. Applicable or relevant and appropriate requirements (ARARs) must be met in removal actions to the extent practicable. The pesticide waste at the site has been identified as a listed hazardous waste under the Resource Recovery and Conservation Act (RCRA), and the substantive management requirements of that statute will be complied with. In addition to RCRA, all major federal and state environmental laws have been reviewed and ARARs incorporated into work controlling documents.

### **B. Estimated Costs**

The cost of the removal action is estimated to be \$620,000.00. Approximately 1,405 tons of soil will be excavated and transported out of state for treatment and disposal at a RCRA permitted treatment and disposal facility.

C. Schedule

It is estimated the removal action will take 3.5 weeks to complete this activity in the field.

**VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN**

Contamination has the potential to spread, on the surface and in groundwater, especially if a severe weather event such as a hurricane passes over the island. Although the site is fenced, immediately outside the fenceline is a pedestrian sidewalk, placing the public in close proximity to the site.

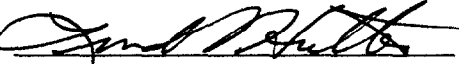
**VII. OUTSTANDING POLICY ISSUES**

There are no outstanding policy issues at this site. Complete funding for this removal is approved and provided by the U.S. Navy, Southern Division Naval Facilities Engineering Command.

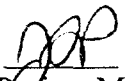
**VIII. RECOMMENDATION**

**This decision document represents the selected removal action for the IR-3 site, in Key West, Florida, developed in accordance with CERCLA as amended, and not inconsistent with the NCP. This decision is based on the administrative record for the site.**

Conditions at the site meet the NCP section 300.415(b)(2) criteria for a removal action.

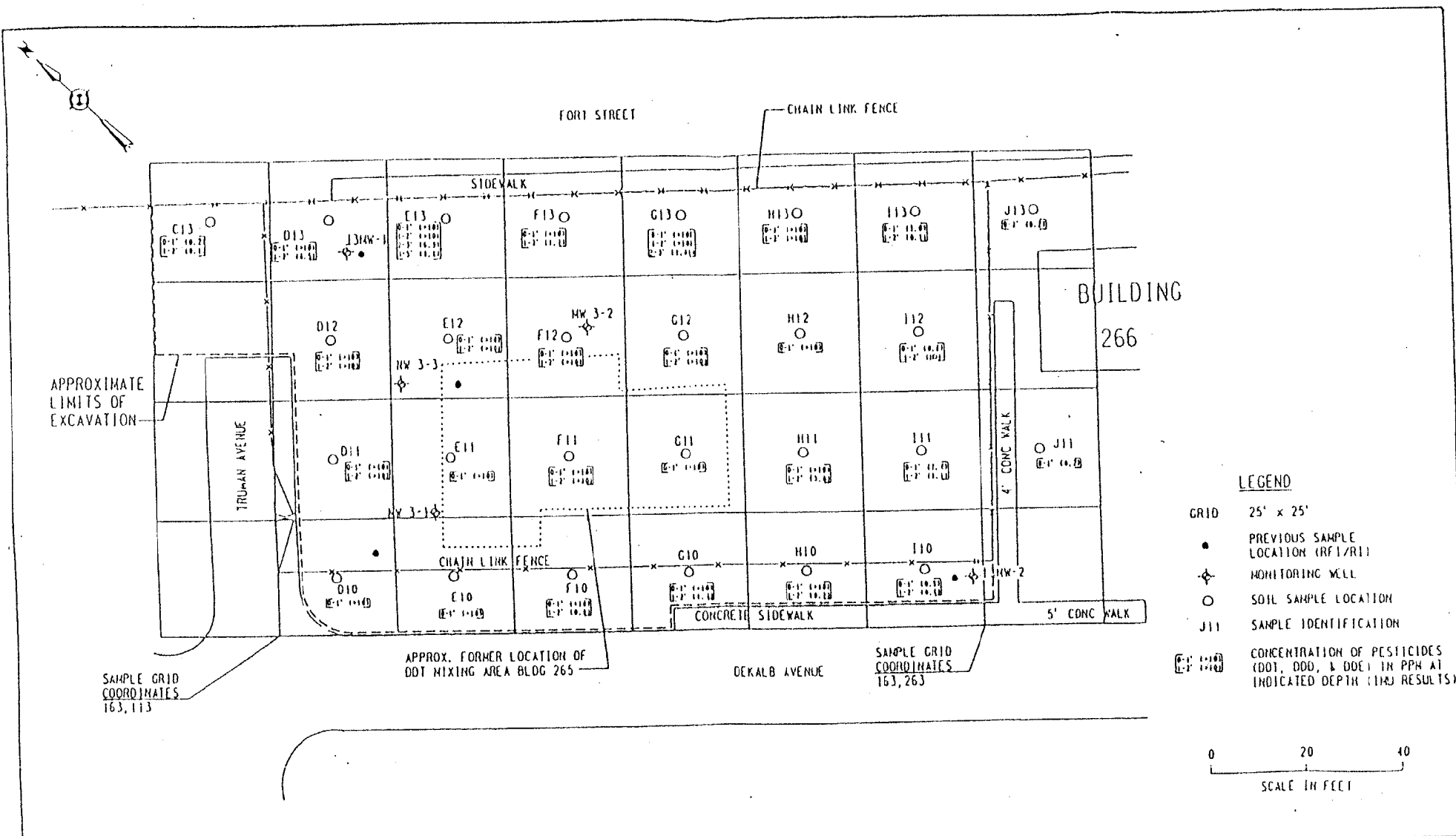
APPROVED:   
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Commanding Officer  
Naval Air Station Key West

DATE: 6 NOV 95

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Response Action Contractor

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**FIGURE 1**  
**IR NO.3 - TRUMAN ANNEX (KEYWEST)**  
**DDT MIXING AREA - PESTICIDE RESULTS**